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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/523,086	02/02/2005	Norbert Herfert	29827/40801	8509

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MARSHALL, GERSTEIN & BORUN LLP
233 S. WACKER DRIVE, SUITE 6300
SEARS TOWER
CHICAGO, IL 60606

EXAMINER	
BERNSHTEYN, MICHAEL	
ART UNIT	**PAPER NUMBER**
1713	

DATE MAILED: 05/31/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/523,086	HERFERT ET AL.	
	Examiner	Art Unit	
	Michael Bernshteyn	1713	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) 1-30 is/are pending in the application.

4a) Of the above claim(s) 20-30 is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) 1-19 is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☒ Claim(s) 1-30 are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

1. This Office Action follows a response filed on March 14, 2006. Claims 20-27 have been withdrawn from consideration, claims 28-30 have been cancelled.

2. The traversal is on the ground(s) that according to PCT Rule, claims of different categories with common special technical features do not lack novelty. This is not found persuasive because the claimed common special technical feature in all claims is adding clay to superabsorbent polymers during the surface-crosslinking step, and this common special technical feature lacks of novelty. For example, Sun et al. (U.S. Patent 6,124,391) discloses a particulate material composition of superabsorbent polymer particles, which can be produced by mixing the superabsorbent polymer particles with an inorganic powder, such as clay (abstract).

The requirement is still deemed proper and is therefore made FINAL.

3. Claims 1-19 are pending.

Claim Rejections - 35 USC § 102

4. The test of this section of Title 35, U.S.C. not included in this action can be found in a prior Office Action.

5. Claims 1-5 and 7-17 are rejected under 35 U.S.C. 102(e) as being anticipated by Sun et al. (U.S. Patent 6,124,391) for the rationale recited in paragraph 4 of Office Action dated on December 15, 2005.

Claim Rejections - 35 USC § 103

6. The test of this section of Title 35, U.S.C. not included in this action can be found in a prior Office Action.

7. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable as obvious over Sun et al. for the rationale recited in paragraph 6 of Office Action dated on December 15, 2005.

8. Claims 18 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sun et al. in view of Beerse et al. (U.S. Patent Application Publication 2002/0006886) for the rationale recited in paragraph 7 of Office Action dated on December 15, 2005.

9. It is noted that non-final Office Action dated on December 15, 2005 contains typing errors in paragraphs 6 and 7 concerning the numbers of rejected claims, which are corrected in this Office Action.

Response to Arguments

10. Applicants traverse the rejection of claims 1-5 and 7-17 under 35 U.S.C. 102 (b) as being anticipated by Sun et al. (U.S. Patent 6,124,391). Applicant's arguments have been fully considered but they are not persuasive.

11. Applicants contend that according the prior art (US'391), the inorganic powders (clay) can be added to the SAP particles in the amount sufficient to achieve anti-caking properties, up to a maximum of 10wt%, and preferably less than 10 wt% (col. 7, lines 27-32). Additionally, the examples of the US'391 are SAP particles having a clay

concentration of 0.5 to 3 wt.%. Accordingly, because the US'391 does not recite every element of the claims, the US'391 cannot participate the present claims under 35 U.S.C. 102(b). The US'391 contains no teaching or suggestions that would motivate a person skilled in the art to increase the amount of inorganic power above the disclosed maximum limit of about 10% by weight (pages 11-12).

Applicants contend that including a clay in the surface crosslinking step, in the claimed amount of about 12% to about 35% by weight, provides the unexpected benefits of reducing the amount of fine-sized SAP particles and improving the permeability of the clay-treated SAP particles (see specification, page 7, lines 32-35, and page 8, lines 12-16 for example).

12. In response to applicant's arguments it is worth to mention that the specification contains the examples 5 and 6 on the pages 30-32 showing that the permeability of the clay-treated SAP particles is increasing and the amount of fine-sized SAP particles is decreasing while the amount of clay is increasing. It is noted and seems very important that the gap between the closest amounts of clay is equal to **5 wt%** (e.g., 5, 10, 15, etc.). Therefore, it is unclear, why the claimed range of clay amount is about 12% because in the real examples this amount was not investigated at all.

The prior art clearly discloses that the amount of clay is **about 10 wt%**, that means that the amount of clay can be, for example, 11 wt%. Applicants claim that the amount of clay is **about 12 wt%**, that means that the amount of clay also can be, for example, 11 wt%. Therefore, the above results are not unexpected in view of teaching of the prior art, as applicants contend (page 13, 4th paragraph).

The term "about" permits some tolerance, and therefore, encompasses values on either side of the claimed value or number, ***In re Pappas***, 214 F. 2d 172, 176-177, 102 USPQ 298, 301 (CCPA 1954); ***In re Vaney*** 185 F. 2d 679, 683, 88 USPQ 97, 101 (CCPA 1950).

Thus, Applicants' arguments are not well taken for the following reason. When the claimed range and the prior art range are very similarly (i.e., less than 2 and 2), the range of the prior art establishes prima facie obviousness because one of ordinary skill in the art would have expected the similar ranges to have the same properties. See *In re Peterson*, 65 USPQ 2d 1379, 1382, citing *Titanium Metals Corp. V. Banner*, 227 USPQ 773, 779. Furthermore, the disclosure by the reference of a preferred embodiment does not teach away from the entire disclosure of the patent, all of which must be considered in the analysis of obviousness, *In re Burckel*, 201 USPQ 67, 70.

13. Applicants traverse the rejection of claims 18 and 19 under 35 U.S.C. 103 (a) as being unpatentable over Sun et al. (U.S. Patent 6,124,391) in view of Beerse et al. (U.S. Patent Application Publication 2002/0006886). Applicant's arguments have been fully considered but they are not persuasive.

14. Applicants contend that the US'886 does not overcome the deficiencies of the US'391. The quaternary ammonium compounds of the US'886 are not incorporated into clay particles to provide an organophilic clay as required. And furthermore the US'886 is not remotely directed to SAP particles.

15. In response to applicant's arguments it is worth to mention that the US'886 discloses that the term 'tallow' refers to an alkyl group derived from tallow fatty acids

(usually hydrogenated tallow fatty acids), which generally have mixtures of alkyl chains in the C_{12} to C_{14} range. Examples of quaternary ammonium salts derived from these tallow sources include ditallow dimethyl ammonium chloride, ditallow dimethyl ammonium methyl sulfate, di(hydrogenated tallow) dimethyl ammonium chloride, di(hydrogenated tallow) dimethyl ammonium acetate, ditallow dipropyl ammonium phosphate, ditallow dimethyl ammonium nitrate, tallow ammonium chloride, etc. (page 21, [0228]).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to incorporate organophilic clay selected from tallow derivatives as taught by Breese in Sun's superabsorbent polymers in order to obtain a superabsorbent polymers with additional linkages, or hydroxyl, or amino group substituents (e.g., the alkyl groups can contain polyethylene glycol and polypropylene glycol moieties) (US' 886, page 21, [0224]).

16. In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, US'886 relates to a substantially dry, disposable personal care article which is particularly useful for personal cleaning application. US'391 disclose s a particulate material composition of

superabsorbent polymer particles. Therefore, both references belong to the same field of endeavor concerning the obtaining the compositions with anti-caking properties and reduced dusting.

17. In the light of the discussion above, the rejection of record has not been withdrawn. The rejection remains in force.

18. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael Bernshteyn whose telephone number is 571-272-2411. The examiner can normally be reached on M-F 8-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Wu can be reached on 571-272-1114. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Michael Bernshteyn
Patent Examiner
Art Unit 1713

MB
05/18/2006

DAVID W. WU
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 1700